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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/721,466 | 11/26/2003 | Ryoko Matsuo | 245915US2RD | 8125 |
| 22850 7590 01/25/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | EXAMINER DOAN, KIET M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2617 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 01/25/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|-------------------------------|-------------------------------|--|
| Office Action Summary | Application No. 10/721,466 | Applicant(s) MATSUO ET AL. | |
| | Examiner Kiet Doan | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz et al. (Patent No. 6,345,186) in view of (Pub. No. 2002/0160773).

Consider **claims 1, 10, 17**. Schultz teaches a wireless control apparatus which performs a wireless communication with a plurality of wireless terminals, comprising:

an evaluation signal receiver which receives evaluation signals relating to received signals in the respective wireless terminals, which are transmitted from said plurality of wireless terminals (Abstract, C6, L31-45, Fig.1, Illustrate base station 3 which receives evaluation signals from plurality of mobile station 5). Schultz teach the limitation of claims as discuss **but silent on**

a supplement signal generating unit configured to generate a supplement signal necessary to supplement deficient part of the received signals in said plurality of wireless terminals, using the evaluation signal; and a supplement signal transmitter which transmits the supplement signal decided by said supplement signal generating unit, to said plurality of wireless terminals.

In an analogous art, Gresham teaches "Communications system for aircraft including wireless system". Further, **Gresham teaches** a supplement signal generating

unit configured to generate a supplement signal necessary to supplement deficient part of the received signals in said plurality of wireless terminals, using the evaluation signal; and a supplement signal transmitter which transmits the supplement signal decided by said supplement signal generating unit, to said plurality of wireless terminals (Abstract, Paragraphs [0037-0041], Fig.1 Illustrate and teach system 10 wherein contain server 20 as read on supplement signal that generate signal necessary to supplement deficient part of the received signals in said plurality of wireless terminals as read on terminal 40 a-b).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Schultz and Gresham system, such that performs a wireless communication with a plurality of wireless terminals and evaluation signal from plurality of wireless terminals and generate a supplement signal necessary to supplement deficient part of the received signals in said plurality of wireless terminals, using the evaluation signal to provide means for preventing lost of communication when transmitted or received data/RF signals when travel from one location to another location.

Consider **claims 2, 13, 18**. Schultz teaches the wireless control apparatus according to claim 1, wherein the evaluation signals are signals which indicate at least one of deficient part of the received information signal at said wireless terminals, propagation environment and capability of wireless terminals (C2, L42-55, C6, L31-45, teach the base station arrange communication with mobile station which means as

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evaluation signals are signals which indicate at least one of deficient part of the received information signal at said wireless terminals).

Consider **claims 3-9, 11-12, 14-16, 19-20**, wherein all the limitations of claims are similar and recited. Gresham teaches the wireless control apparatus according to claim 1, wherein the supplement signal is a signal instructed to a wireless terminal capable of correctly receiving information signal, to receive the information signal instead of a wireless terminal not being able to correctly receive the information signal. (Abstract, Paragraphs [0013-000017], [0037-0048], Fig.1 Illustrate and teach server which couple to base station as read on supplement signal).

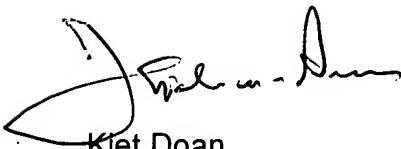
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan
Patent Examiner



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER